Application No.	Applicant(s)	
10/696,787	TURNER, CHRISTOPHER DAVID	
Examiner	Art Unit	
Leith A. Al-Nazer	2821	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to communications filed on 30 October 2003.		
2. The allowed claim(s) is/are <u>1-23</u> .		
3. The drawings filed on are accepted by the Examiner.		
 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some* c) None of the: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) hereto or 2) to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
6. ☐ Interview Summary Paper No./Mail Dat 98), 7. ☐ Examiner's Amendr	e	
	Examiner Leith A. Al-Nazer Pars on the cover sheet with the car (OR REMAINS) CLOSED in this apport of the appropriate communication GHTS. This application is subject to and MPEP 1308. On 30 October 2003. The been received. The been received in Application Nocuments have been received in this communication to file a reply lient of this application. The been received in Application Nocuments have been received in this communication to file a reply lient of this application. The been received in Application Nocuments have been received in this communication to file a reply lient of this application. The been received in Application Nocuments have been received in this communication to file a reply lient of this application. The been received in Application Nocuments have been received in this communication to file a reply lient of this application. The been received in Application Nocuments have been received in this communication to file a reply lient of this application. The been received in Application Nocuments have been received in this communication to file a reply lient of this application. The been received in Application Nocuments have been received in this communication to file a reply lient of this communication to file a repl	

Application/Control Number: 10/696,787 Page 2

Art Unit: 2821

DETAILED ACTION

Drawings

1. The drawings are objected to because reference number 34 is not shown in figure 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

2. Claims 1-23 are allowed.

Application/Control Number: 10/696,787 Page 3

Art Unit: 2821

3. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or suggest one or more of the limitations found in independent claims 1, 9, 17, and 23. U.S. Patent No. 4,803,493 to Jamison teaches a similar system to that of the present application. However, with respect to independent claim 1, Jamison and the other prior art of record fails to teach or suggest the step of raising the antenna mast to a greater height than the current elevational position if the compared signal quality level is less than the threshold minimum signal quality level and if the current elevational position is less than a maximum height of the antenna mast. With respect to independent claim 9, the prior art of record fails to teach or suggest the step of raising the antenna mast to a greater height than the current elevational position if the compared signal quality level is less than the threshold minimum signal quality level, if the current elevational position is less than a maximum height of the antenna mast, and if the detected obstacle is not within the clearance zone about the antenna mast. With respect to independent claim 17, the prior art of record fails to teach or suggest an elevational system for raising the antenna mast to a greater height than the current elevational position if the compared signal quality level is less than the threshold minimum signal quality level and if the current elevational position is less than a maximum height of the antenna mast. With respect to independent claim 23, the prior art of record fails to teach or suggest an elevational system for raising the antenna mast to a greater height than the current elevational position if the compared signal quality level is less than the threshold minimum signal quality level, if the current elevational position is less than a maximum height of the antenna mast, and if the

Art Unit: 2821

detected obstacle is not within a clearance zone about the antenna mast. Therefore, independent claims 1, 9, 17, and 23, as well as all dependent claims, are allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of Pertinent References

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patent publications further show the state of the art with respect to antenna mast systems:
 - a. U.S. Patent No. 2,834,012 to Allen
 - b. U.S. Patent No. 4,932,176 to Roberts et al.
 - c. U.S. Patent No. 5,164,739 to Koide et al.
 - d. U.S. Patent No. 5,865,390 to Iveges

Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leith A. Al-Nazer whose telephone number is 571-272-1938. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

Application/Control Number: 10/696,787 Page 5

Art Unit: 2821

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LA

Supervisory Patent Examiner Technology Center 2800